In re: Kyoung-Il SEO, et al. U.S. Appl. No.: 10/534,839

Remarks

Introduction

This Preliminary Amendment is submitted in reply to the final Office Action mailed July 15, 2009 and the Advisory Action mailed October 26, 2009.

Claims 8, 13 and 18 were objected to in the final Office Action, but seem to have been overcome by the amendments made in the Reply to Final Office Action, filed on October 9, 2009, as noted in the Advisory Action.

Claims 1-4, 7-15, and 17-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0021176 ("Mimura") in view of U.S. Patent No. 6.515.989 ("Rönneke").

Claims 5-6, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mimura in view of Rönneke and in further view of U.S. Patent Publication No. 2002/0105911 ("Pruthi").

Applicants amended independent claims 1, 8, 12 and 18, and respectfully traverse the rejections based on the above amendments and following remarks. Applicants respectfully request reconsideration and allowance of all the pending claims, namely claims 1-21.

II. Applicants' Response to the 35 U.S.C. § 103(a) Rejections of the Independent Claims A. Introduction

Independent claims 1, 8, 12 and 18 are currently pending and were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mimura in view of Rönneke.

Claim 1 recites a packet data separator that facilitates providing a wireless data service by a service server. The packet data separator is configured to separate user packet data transmitted between the service server and a mobile communication exchange or a packet controller.

Claim 1 also recites, *inter alia*, that the packet data separator is configured to receive the user packet data "only after an RP registration is provided." Independent claims 8, 12 and 18 are similar to claim 1 and likewise recite receiving the user packet data "only after an RP registration is provided."

Mimura suggests a "packet switch [that] identifies a communication flow carried across an IP network, observes the communication flow, and acquires statistics data thereof, such as the number of packets that passed through the switch, the number of discarded packets, time at

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which the packets arrived at the switch, and time at which the packets were sent out from the switch." Mimura abstract.

As previously acknowledged in the previous Office Actions, "Mimura does not explicitly teach of using of a wireless data service through a mobile communication network and therefore does not disclose the registration of subscriber's device to use such service." Final Office Action, page 4. To fill this deficiency of Mimura, the Examiner cites Rönneke, and alleges that Rönneke "discloses [1] a mobile communication network with architecture that inter-works with existing packet data networks and provides data series to subscriber's mobile station" and "[2] the basic functions of its mobile communication network components which include authentication and management of mobile stations" Final Office Action, page 4. The Examiner adds in the Advisory Action that, allegedly, Rönneke's "authentication, ciphering and identification check done for each mobile stations are implicitly done before communication is allowed on the network provider's resource in order to correctly bill the subscriber per actual packet being communicated through the network." Advisory Action, page 3.

B. Even if all the Examiner's statements are accepted as true, the Mimura-Rönneke combination would still fail to suggest each recitation of applicants' amended independent claims.

Rönneke says that "all packets transported at a physical layer of the network" are retrieved and processed (Rönneke, col. 3, lines 10-11), and that "the SGSNs 18 perform authentication, ciphering and identification check, mobility management, and logical link management for the mobile stations 12" (Rönneke, col. 3, lines 60-63, which the Examiner bases the rejections; see final Office Action, page 4). Although this disclosure of Rönneke does not say whether all the packets are transported prior to, during, or after "the SGSNs 18 perform authentication, ciphering and identification check, mobility management, and logical link management for the mobile stations 12" (Rönneke, col. 3, lines 60-63), the Examiner alleges that this is "implicitly done before communication is allowed on the network provider's resource in

¹ While applicants reserve the right to contest (in a future response or during an appeal) each of the statements alleged in the Office Action, to expedite allowance of this case, applicants are willing to accept arguendo (for now) the Examiner's statements in the Office Action as true and accurate.

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order to correctly bill the subscriber per actual packet being communicated through the network." Advisory Action, page 3.

However, since Rönneke's authentication, ciphering and identification functions are done to "all packets transported at a physical layer of the network" (Rönneke, col. 3, lines 10-11) and, according to the Examiner, this is "implicitly done before communication is allowed on the network provider's resource," Rönneke must fail to show or suggest, both implicitly and explicitly, applicants' claim recitation of being configured to receive or receiving the user packet data "only after an RP registration is provided." Independent claims 1, 8, 12 and 18.

In contrast, even if the Examiner's statement as to what Rönneke allegedly shows is true, Rönneke would still be required to receive and process "all packets transported at the physical layer of the network" (Rönneke, Col. 3, Lines 10-11) not just the packets received only after an RP registration is provided.

Accordingly, because Rönneke fails to explicitly state when user packet data would be received relative to Rönneke's "authentication" check, 2 let alone if user packet data would be received after an RP registration is provided, and because Mimura fails to suggest a mobile communication system, let alone receiving packet data after an RP registration is provided, the Mimura-Rönneke combination fails to show a "packet data separator [being] configured to ... receive the user packet data only after an RP registration is provided" as recited by applicants' independent claim 1. Independent claims 8, 12 and 18 are similar to claim 1 and likewise recite receiving the user packet data "only after an RP registration is provided." Therefore, independent claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination.

C. The Mimura-Rönneke combination cannot be combined as proposed by the Examiner.

As previously acknowledged by the Examiner, Mimura is not designed for use with any mobile standard, including those referred to in Rönneke. One of ordinary skill in the art, at the time applicants' invention was made, would have believed that statistics provided by Mimura's IP switching hubs would not have been sufficient for analyzing mobile communications, like

If necessary in a future response or appeal proceeding, applicants reserve the right to distinguish applicants' claimed RP Registration from the portion of Rönneke cited by the Examiner to show applicants' claimed RP Registration.

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those of Rönneke. In fact, the background of applicants' specification specifically points out that:

Analysis of the packet data traffic in the above-configured IP network depends on the statistics provided by the IWF, the PDSN 40, an S/H (switching hub) which is an IP instrument, or a router, but the statistics are insufficient for analyzing various types of packet data traffic since the statistics provide restricted statistical information to the user for the proper maximum performance of systems.

Applicants' specification, paragraph [0010] (emphasis added).

Moreover, Rönneke also explains why IP switching hubs, such as Mimura's packet switch, are not sufficient for analyzing mobile communications.

As a result, convention IP routers, that support billing functions, are designed with integrated traffic and billing computing resources. ... If the billing function and the traffic function are integrared, however, these functions end up competing for the use [of] the same computing resource. ... Accordingly, there is a need to provide a simple and cost effective mobile data service that is capable of providing billing function on a per-packet basis, without adversely effecting the traffic function of the network.

Rönneke, col. 1, lines, 45-50 and col. 2, lines 1-3 and 10-13 (emphasis added).

In other words, IP network switches, like Mimura's switches, were known by those of ordinary skill in the art at the time of applicants' invention and they were known as being insufficient for analyzing mobile communications' packet data traffic just as they were known years before when Rönneke was filed.

Accordingly, as evidenced by Rönneke's own disclosure, there was a long felt need for applicants' claimed inventions, and for at least this reason, independent claims 1, 8, 12 and 18 are not obvious in view of Mimura and Rönneke. Accordingly, independent claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination.

D. Even if Mimura could be combined with Rönneke, the combination would produce a system that includes the Mimura packet switch that operates separate from the Rönneke Billing Data computing resource.

Despite acknowledging the reasons why Rönneke teaches away from Minura and despite relying on disclosure that is allegedly "implicit" to Rönneke to reject applicants' previously

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pending claims as being obvious, the Examiner argues that Rönneke can be combined with Mimura, because "Ronneke does not *explicitly* claim that the separate resources must be in separate devices." Advisory Action, page 3 (emphasis added).

Rönneke's "invention adds an *independent* computing resource with a *separate* Billing data function to the same Ethernet physical layer as that used by incoming and/or outgoing packets to the Traffic function computing resource 38." Rönneke, col. 4, lines 45-49. In other words, the entire thrust of Rönneke is to have a Billing Data computing resource *separate from a traffic function computing resource*, as opposed to integrating various functionality of the Billing Data computing resource into an existing or well known traffic monitoring resource, such as Rönneke's traffic function computing resource 38 or Mimura's packet switch. Accordingly, if applicants' previous remarks submitted herein do not persuade the Examiner that the Mimura-Rönneke combination is insufficient, the combination would still yield a system that includes two separate components that operate in parallel: the first being Mimura's packet switch, and the second being Rönneke's Billing Data computing resource.

Therefore, even if the Mimura-Rönneke combination is proper, the combination can be rebutted. In particular, Rönneke explicitly teaches away from the Examiner's suggested combination with Mimura. Rönneke would be rendered useless for its intended purpose if Rönneke were combined with Mimura as suggested in the Office Action. Rönneke's Billing Data computing resource is explicitly designed to work in parallel with a traffic monitoring component, not to be combined with Mimura's packet switch. See, e.g., Rönneke, FIG. 2. In other words it goes against the teachings of Rönneke to integrate some of its Billing Data computing resource functionality in something like Mimura's packet switch. This is further supported by the Examiner's acknowledgement that "Ronneke recites insufficiency of convention IP routers," despite the Examiner twisting this to mean that "Ronneke's citation of insufficiency would futher encourage one of ordinary skill in the art to improve Mimura's disclosure with Ronneke's teaching in order to adapt to the growing mobile data sevic [sic] market." Advisory Action, page 3.

"It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)." MPEP § 2145.X.D. See also MPEP §§ 2141.02 and 2141.03. Accordingly, independent claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination, since Rönneke

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teaches away from its combination of Mimura for the reasons acknowledged by the Examiner in the Advisory Action.

E. Summary of responses to rejections of independent claims under 35 U.S.C. § 103(a).

For at least these reasons, Mimura fails to render independent claims 1, 8, 12 and 18 unpatentable. Thus the rejections of independent claims 1, 8, 12 and 18 should be withdrawn and the claims should be allowed.

III. Reply to Rejections of Dependent Claims 2-7, 9-11, 13-17 and 19-21

For at least the foregoing reasons, independent claims 1, 8, 12 and 18 are patentable and, since claims 2-7, 9-11, 13-17 and 19-21 depend from and necessarily include all of the recitations of one of independent claims 1, 8, 12 and 18, the cited documents, whether taken alone or in combination, do not teach or suggest the system and methods of claims 1, 8, 12 and 18 for at least the same reasons as described above in conjunction with the respective independent claims. ("If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious." In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); MPEP § 2143.) Accordingly, it is therefore submitted that the 35 U.S.C. § 103(a) rejections of claims 2-7, 9-11, 13-17 and 19-21 have been overcome.

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IV. Conclusion

In view of the remarks presented above, applicants submit that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact applicants' undersigned attorney in order to resolve any remaining issues.

It is believed that a petition for a one month extension of time and corresponding fees are required, which is provided for in the related papers being filed herewith. The papers accompanying this Amendment also authorize the payment of the necessary fees. However, in the event that any additional extension of time and/or other fees are necessary to allow consideration of this Amendment, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims and the Request for Continued Examination) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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